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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,485	12/20/2000	Richard G. Morton	2000-00871-1	9464

7590 06/18/2003
Albert P. Cefalo And William Cray
Cymer, Inc.
Legal Dept. MS/1-2A
16750 Via Del Campo Court
San Diego, CA 92127

EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT PAPER NUMBER

2828

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,485

Applicant(s)

MORTON, RICHARD G.

Examiner

Davienne Monbleau

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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DETAILED ACTION

Response to Amendment

Claims 1 and 12 have been amended. Claims 1-17 are pending. Claims 12-17 are withdrawn from consideration because they pertain to a non-elected group from the restriction dated on 9/25/02. An action on Claims 1-11 follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meller et al. (U.S. Patent No. 5,729,565) in view of Wiedemann et al. (U.S. Patent No. 4,742,527). Regarding Claim 1, Meller et al. teach in Figure 1 an excimer laser comprising a laser chamber (10) containing a laser gas and an electrode set (14 and 16). Meller et al. further teach in column 4 lines 16-17 that said laser gas comprises fluorine and in column 2 lines 27-29 that electrodes may be of a copper alloy material. It is known in the art that said excimer laser comprises an anode, a cathode, a pulse power system to create the electrical pulses across said electrode set, and circulating means (see Meller et al. column 4 lines 16-18). Meller et al. do not teach that said electrodes are annealed. Wiedemann et al. teach in column 2 lines 28-32 annealing said electrodes. It would have been obvious to one of ordinary skill in the art at the time of the invention to anneal said electrodes in Meller et al., to reduce internal stresses.

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Claims 2-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meller et al. (U.S. Patent No. 5,729,565) in view of Wiedemann et al. (U.S. Patent No. 4,742,527), as applied to claim 1 above, and further in view of Baumler et al. (U.S. Patent No. 4,860,300). Regarding Claims 2-4, Meller et al. do not teach electrodes comprising copper, aluminum, iron and nickel. Baumler et al. teach in column 2 lines 29-46 that electrodes may comprise copper, aluminum, nickel and iron. It would have been obvious to one of ordinary skill in the art at the time of the invention to use these electrode materials in Meller et al., as taught by Baumler, to increase the life of the electrode. Determining the exact composition of the elements involves routine skill in the art.

Regarding Claims 5-7, Meller et al. do not teach that said electrodes comprise zinc. Baumler et al. teach in column 2 lines 45-46 that the copper alloy of an electrode may comprise zinc. It would have been obvious to one of ordinary skill in the art at the time of the invention to use these electrode materials in Meller et al., as taught by Baumler, to increase the life of the electrode. Determining the exact composition of the elements involves routine skill in the art.

Regarding Claims 8-11, Meller et al. do not teach that said electrodes comprise zinc and lead. Baumler et al. teach in column 2 lines 45-46 that the copper alloy of an electrode may comprise zinc and other materials. It would have been obvious to one of ordinary skill in the art at the time of the invention to use these electrode materials in Meller et al., as taught by Baumler, to increase the life of the electrode. Determining the exact composition of the elements involves routine skill in the art.

Response to Arguments

Applicant's arguments filed 12/10/02 have been fully considered but they are not persuasive. The Applicant argues that the prior art does not teach "annealing of electrodes after machining". First, the phrase in Claim 1 reciting "wherein said cathode and anode..." has not been given weight. This "wherein clause" is directed towards a method or process of making an electrode and does not provide a positive structural limitation to the claim, nor does it further limit a previously mentioned structural limitation. Additionally, the process for making an electrode was originally restricted out in the office action dated 9/25/02 because it is in fact a separate invention. Second, Wiedemann et al. does not specify in what order the annealing and machining occur and thus could be interpreted either way. Therefore, the prior art teaches the claimed invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Paz de Araujo et al. (U.S. Patent No. 6,110,531) teach in column 3 lines 38-42 annealing an electrode after deposition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 703-306-5803. The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Danienne Montbaur

DNM
June 10, 2003

Paul IP

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